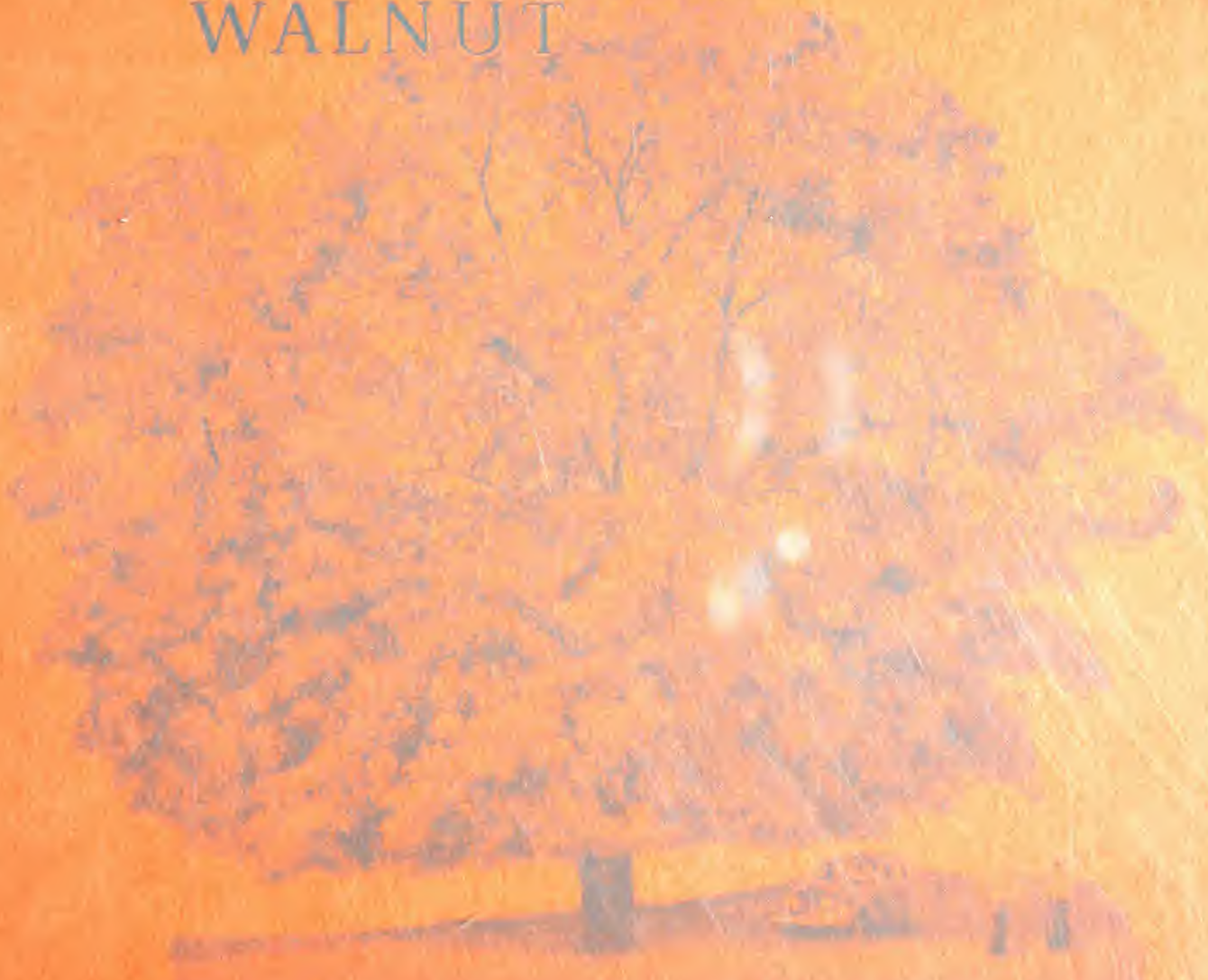
THE STORY OF AMERICAN WALNUT



WALNUT'S HOME *in* NORTH AMERICA *and* EURASIA

THE STORY OF AMERICAN WALNUT

by

BURDETT GREEN

M. F., YALE UNIVERSITY SCHOOL OF FORESTRY;
FORMERLY OF U. S. FOREST SERVICE

and

BERNARD C. JAKWAY

AUTHOR OF "THE PRINCIPLES
OF INTERIOR DECORATION"

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CHICAGO

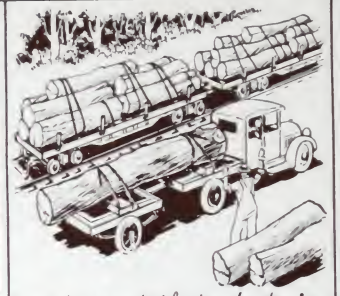
CALENDAR

Scenes from the story of AMERICAN WALNUT

PLANTED A.D. 1834 — A CENTURY OF GROWTH

Planted when Andrew Jackson was President, this American Walnut tree draws strength from the soil for a hundred years.

May 1934: The tree is logged··



and transported by truck & train··

··to the saw-mill yards.

June 1934: It is cut into lumber

··which is stored for air-drying.

Had this tree been cut into veneers, the operations would have been far more numerous and complex, but speedier.

A huge veneer machine in operation

June 1936: After two years of air-seasoning, the lumber reaches the furniture plant, goes into the kilns; then into production, which involves ...

··fine designing and

hundreds of exacting machine &

hand operations, terminating

Oct. 1936: In the finishing room.

Nov. 1936: In the furniture store··

December 1936: The tree at last enters the home, for another hundred years of satisfying service···

FOREWORD

SOME two hundred thousand copies of earlier editions of The Story of American Walnut have passed into the hands of readers. In this, the eighth edition, that Story is told in a new way. The text has been re-written throughout, in order to take account of new developments in technology and design. The pages are larger, and have been planned to permit the largest possible use of illustrations.

Walnut has played a part in the advancing arts of civilization for so long a time that anything approaching a full account of its history, uses, and technology would demand a very thick volume. This little book can have no such ambitious aim. It is designed to interest the general reader rather than the expert, and especially to interest the homemaker. If she finds its pages stimulating and informative, this latest edition of the Story will have served its primary purpose.

Small as it is, the booklet's preparation has demanded special knowledge of two widely diverse fields—wood technology and the home-furnishing art. This requirement has made teamwork a necessity.

B. G.
B. C. J.

Planted by his father, a Walnut tree stood guard over the tomb of George Washington until its death in 1916. The great burl is preserved in the National Museum.

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SECTION TITLES

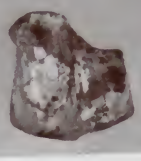
I: From very ancient times to our own day 4
II: A key to lasting satisfactions 5
III: The family and personality of *J. Nigra* 6
IV: Walnut takes the physical examination 7
V: The laboratory speaks the homemaker's language 8
VI: Veneers and plywood panels 10
VII: Solid or veneered construction? 11
VIII: Walnut yields an unapproached variety of beautiful and distinctive figures 12
IX: Procession of the furniture styles 18
X: History in tabloid 19
XI: Furniture of today: Traditional and Modern 20
XII: Distinctive and enduring woodwork 24
XIII: Walnut interiors for homes of moderate cost 27
XIV: "Music hath charms"—for eye as well as ear 28
XV: Multiplied uses of beauty and convenience 30
XVI: The direction of American affairs 32
XVII: In varied industries 34
XVIII: Concerning use and enjoyment 36
XIX: A short reading list 37

Hewn from a giant Walnut log in 1798 by Mitchell Bonhomme, near "Old Vincennes," this boat remained in use on the Wabash river until 1913.

Ill. 6. LEFT: Library of Choni lamasery. The books are carved Walnut blocks, now more than 500 years old.

Ill. 7. RIGHT. 15th Century French Gothic chest in Walnut; Victoria and Albert Museum.

Ill. 5. BELOW: Walnut earrings carved to represent birds; from a grave of the ancient Mound Builders.



FROM VERY ANCIENT TIMES TO OUR OWN DAY

THAT men learned to make use of Walnut long before the dawn of written history is proved by small objects of use and ornament which have come down to us from neolithic times. The Walnut tree entered Europe five hundred years before the beginning of the Christian era, advancing from its ancient home in Persia with the armies of Darius and Xerxes. It spread from Greece to Rome, and was carried by the conquering Roman legions to central Europe and what are now France, Spain and England. Native to North America, its wood was utilized by the prehistoric Mound Builders of the Ohio River country before the coming of the white man.

Far more than any other species, the Walnut tree has played a double role in history. A valuable timber tree, it is also a highly-prized nut tree. In fact its botanical name, *Juglans*, comes from the *Jovis glans* of the Roman writers.

Thus its use in the arts has always been conditioned by the demand for its fruits. That was the case in ancient times, as it is today. In many parts of the world—among them China, India, Persia, Italy, France and the Balkan regions—the tree grows abundantly, but its yield in nuts is so valuable that the timber cut is very narrowly limited.

When medieval life gave place to modern in the 15th and 16th Centuries, Walnut became the dominant cabinet wood in the superb furniture and interior architecture of the Italian Renaissance, as in that of Spain, France, and the Low Countries. Its later story may be read in many of history's more colorful and romantic pages; for Walnut helped to enrich the palaces of kings in the old world, as in the new it helped in the westward march of the pioneers and the winning of a continent.

In our day, thanks to a hundred years of technical and economic progress which in itself is an Arabian Night's romance, the wood serves an amazing variety of new uses in industry and the arts, and plays a part in the beauty and convenience of millions of homes. Handsome, gracious, and enduring, it has met the needs of a changing world for hundreds of years. Nor have the centuries robbed it of youth or versatility; for among all fine woods Walnut today stands first in new and exciting fields—among them such typically 20th Century developments as the radio, the electronic organ, the air conditioning unit, and the Modern style in furniture and decoration.

"Walnut is one of the finest cabinet woods in the world. It has stood the test of time. Trace its use back through the centuries, and it will be found a medium of expression for what successive periods have considered most beautiful and worthy in furniture design. As one lover of the wood phrases it, 'from the massiveness of the Flemish, the elegance of Italian and French, and the balanced beauty of the 18th Century English, Walnut, by its inherent qualities, has been the one cabinet wood that fulfilled all demands.'"

—Quoted from "The Thoroughbred of the Woods," by Professor S. J. Record of Yale University.

Ill. 8. LEFT: Walnut library in the Modern style.

Ill. 9. CENTER: Air-conditioning unit, housed in American Walnut.

Ill. 10. RIGHT: Walnut radio-phonograph in the style of Chippendale.

11. Old bombé chest and bandy-legged chairs in Walnut

Ill. 12. Solid Walnut bedroom furniture in the Early American style

Ill. 13. Walnut woodwork lends an air of gracious dignity to this vista.

A KEY TO LASTING SATISFACTIONS

MANY of the things that the homemaker must buy are short-lived. Foodstuffs are ephemeral. Clothing lasts, at best, for a few seasons only. Wallpapers, draperies, even floor coverings must be renewed at intervals. But interior woodwork, furniture and musical instruments are different. They are long-term investments, and they should be investments in lasting satisfaction.

Because in these and like commodities the cabinet woods are important elements of value, there are many questions about these woods to which prudent buyers will want the answers. Just what qualities, for example, are essential or desirable? In such matters as strength and stamina, must the buyer take the various woods on faith, or are there test data upon which to base sound judgments? As to beauty, prestige, decorative fitness—intangibles which science cannot weigh—what can she learn through printed word or picture that will help toward satisfying choices?

Generous nature has provided a wealth of useful timber trees, and scores of them are used today in making things for the home. Strangely enough, however, it is difficult if not impossible for the homemaker to find accurate and helpful information upon even the more widely used cabinet woods. The answers to her questions are known by experts in technology and marketing; but they have not been stated in her language.

As respects one widely used cabinet wood, the following pages attempt to amend this situation, and to supply wanted information in usable form. The answers to her questions about Walnut as a cabinet wood cannot be of encyclopedic length; but much effort has been spent to make them, wherever facts are involved, of encyclopedic accuracy.

Recent changes in American life have greatly altered the necessary equipment of the homemaker. Modern industry has made many of the old skills obsolete, and enormously reduced the drudgery of housekeeping. On the other hand the duties of family purchasing agent have become increasingly complex, and now demand sound information about an extraordinary range of commodities. So many of these commodities are made of Walnut that full knowledge of the properties of this wood, and its behaviour in service, may well prove a help toward true economy, and a key to lasting satisfactions.

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"In the aristocracy of fine woods, Walnut ranks first in the union of esthetic and physical qualities essential to beauty, superb craftsmanship, and enduring quality. Its handsome texture, at once elegant and distinctive, its richly mellow natural coloring, and its unmatched variety of figure and tone, are known to every homemaker, as its superior mechanical properties are known to every worker in wood."

—Anon.

Ill. 14. LEFT: The guns that hunters cherish have stocks of solid Walnut.

Ill. 15. CENTER: Vertical grand piano in the Modern style, showing louvre back and handsomely figured Walnut.

Ill. 16. RIGHT: A present-day executive office; walls and furniture in American Walnut.

Il. 17: Brocaded velvets and tooled leather, sparkling crystal, and the rich hues of an old Persian rug set off this finely appointed Walnut dining room.

THE FAMILY AND PERSONALITY OF J. NIGRA

THE Walnuts are deciduous trees of the botanical genus *Juglans*. The family numbers some twelve or thirteen species, of which two—the American Walnut, *Juglans nigra*, and the Persian Walnut, *Juglans regia*—are world-famous members of the aristocracy of fine cabinet woods. Both are of forest size, the former sometimes attaining a height of one hundred fifty and a girth of twenty feet. Both yield cabinet lumber of the highest excellence, and an unrivaled variety of beautiful veneers.

Just why American Walnut should have been christened *nigra*, black, we do not know. The botanists may have been influenced by the fact that the wood is darker than Persian Walnut; or by the color of the husk, which turns black as it matures. In any event, there is of course no such thing as physically black Walnut. The wood's natural color, within its outer band of creamy sapwood, ranges through a gamut of soft browns whose deepest note is pale chocolate, sometimes lightly tinged with violet. This innate, through-the-wood coloring, with its sunny and luminous underglow, is a source of both beauty and utility, since no dents or scratches can penetrate so deeply as to show the white scars characteristic of light woods treated with a stain.

Juglans nigra grows naturally throughout the great area which stretches from the Province of Ontario to the northern line of Florida, and from Massachusetts to mid-Nebraska. This botanical range is shown on the picture-map, inside front cover, as is the smaller commercial range from which most of the American Walnut of commerce is now obtained. In this area the timber constitutes a "cash crop" for farmers and an important source of community wealth.

The timber cut of European-Asiatic Walnut (variously known as Persian, Circassian, Italian, French and English Walnut, according to locale) is narrowly limited. Our country supplies nearly all of the Walnut used here, and sends large quantities abroad. This situation has led people to wonder whether resources of the nation's most valuable wood might not be threatened with serious depletion.

In 1925 the U. S. Forest Service estimated the country's stand of marketable Walnut timber at 1,750,000,000 feet. Whether the annual cut has since exceeded the maturing rate of younger trees may be doubted. Meanwhile the National Nut Tree Planting Project, working with the Boy Scouts, the Forest Service, and the Walnut Association, has replaced casual methods by organized planting, and thereby greatly increased the planting rate. Today millions of young trees dot the countryside, adding yearly to its beauty and wealth, and constituting an ever-growing reserve for the future.

Moreover, Nature herself, by making the Walnut tree a sturdy individualist, has set a check to sharp depletion. There are no Walnut forests, in the sense of the pine or fir forests of the South or West. Most trees grow alone or in small groups, on farmsteads scattered throughout an area of several hundred thousand square miles. Hence it is impossible to log off a large body of timber in a single operation. Logs must be accumulated slowly, and from so many individual owners that no large area ever has been, or conceivably could be, wholly stripped of its trees.

A first-class cabinet wood must first of all be handsome; and when used in the form of veneers beauty is the chief though not the sole standard of excellence. When used for solid structural parts, however, it must have certain well-defined mechanical properties. These properties have been subjected to scientific measurement and comparison, with results which appear on the next page.

WALNUT TAKES THE PHYSICAL EXAMINATION

ONE activity of the United States Forest Products Laboratory is to test and measure the properties of structural cabinet woods. Some 250,000 such tests have been made, and from the resulting numerical data we have translated into graph form the facts set up in the chart of physical and mechanical properties printed below. Most of these data have been published in Bulletin No. 556 and Technical Bulletins Nos. 158 and 479 of the U. S. Department of Agriculture. Test results not so published are on file at the Laboratory.

As here used, the term structural cabinet wood means a wood used in the weight-bearing and stress-resisting parts of furniture. For concealed structural uses, strength and stability, plus workability under hand and machine tools, are sufficient. For exposed structural uses, as in the legs of chairs, tables and cabinets, or the posts and rails of dressers and sideboards, these properties must of course be supplemented by beauty, and by the capacity to take a fine finish; while for most household furniture light weight in proportion to strength is also highly important. For face veneers, the only imperative physical property is adequate hardness. Woods which lack this property are easily injured in service.

The chart reveals the comparative properties of several well-known woods, as determined by thousands of scientifically controlled tests. To make comparisons easy, the numerical test results for Walnut, under each property tested for, have been taken as 100%. The relative standings of other woods are indicated in the vertical columns of the chart by the degree in which they exceed or fall short of Walnut's rating.

STRENGTH

In this property, the determinant is not any single strength factor alone, but the composite rating in five factors.

In four of these factors (strength as beam or post, stiffness, shock-resisting ability, and bending strength) the highest rating is desirable. In the fifth (hardness) the ideal rating is one high enough to ensure resistance to hard usage and capacity to take a fine finish, but not so high as to resist edged tools and increase manufacturing and installation costs.

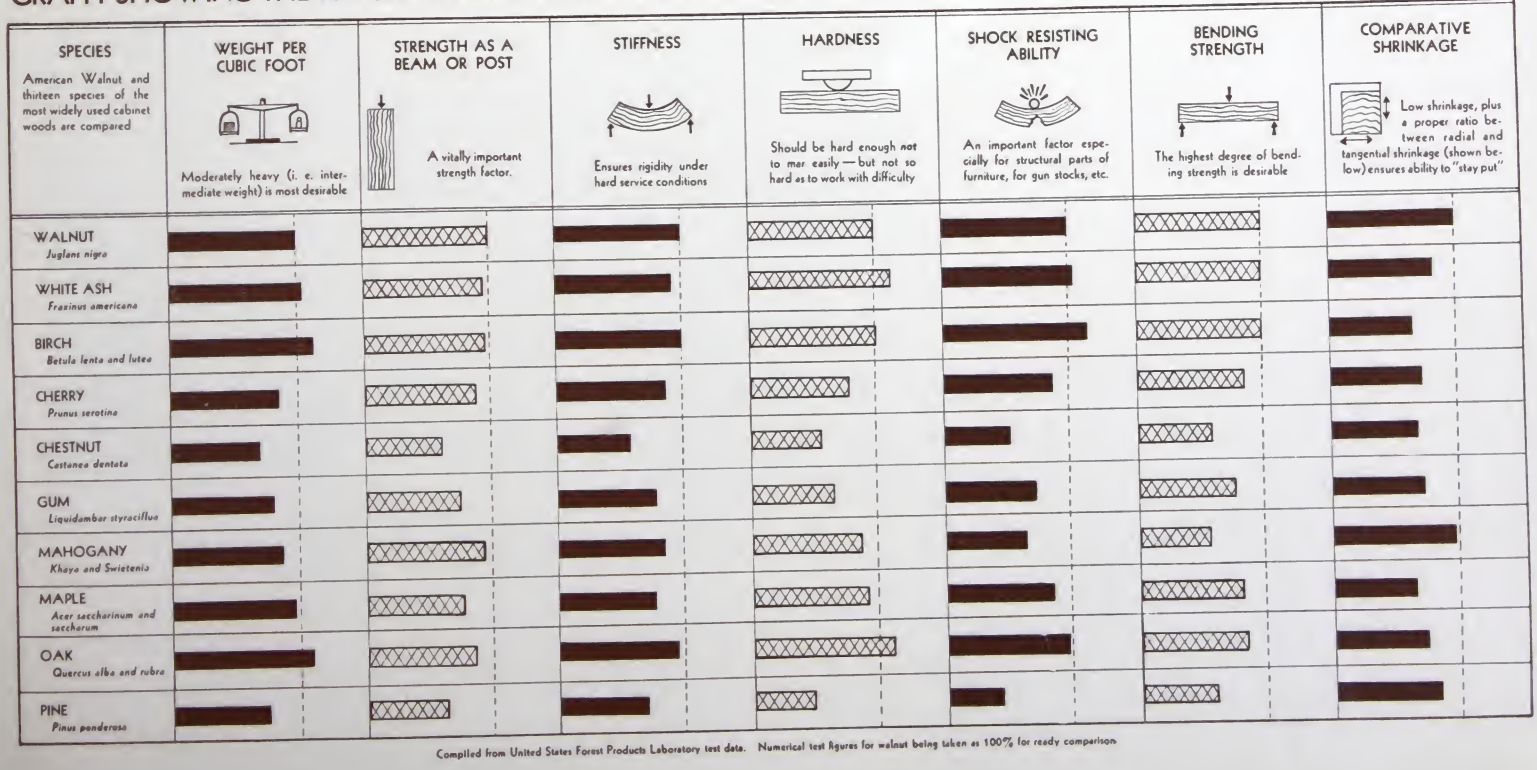
STABILITY

This means, in non-technical language, ability to stay put. A stable wood, properly glued and finished, will not expand or contract in service. When such a wood is used the joints of furniture and woodwork remain tight, drawers neither stick nor rattle, chairs do not become rickety, doors are always easy to open and close.

Stability depends upon low shrinkage and freedom from the tendency to warp or crack; hence a low shrinkage, and also uniformity between radial and tangential shrinkage (i. e., the highest ratio) is imperative.

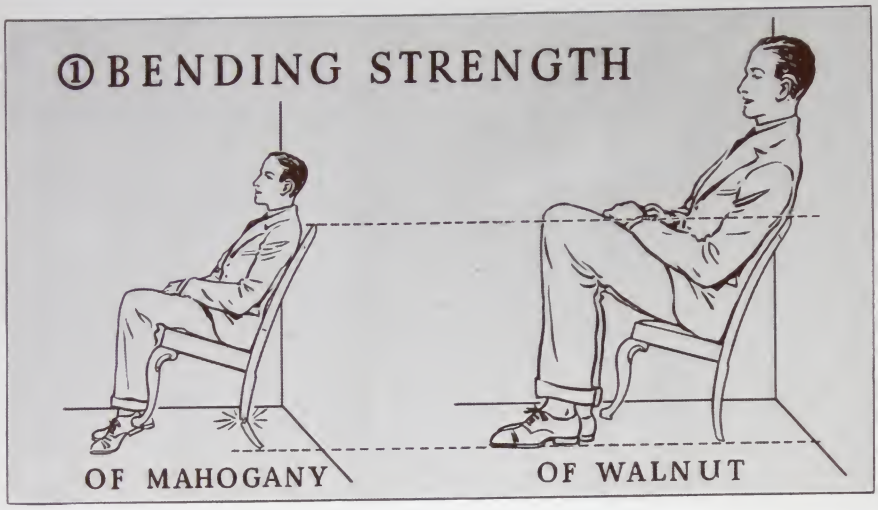
Technicians who want numerical test data can secure copies of the above Bulletins from the Superintendent of Documents in Washington. For the homemaker, however, the chart is more workable. With it she can, in a few minutes, make her own comparisons. They will validate Walnut's reputation for superior excellence as a structural wood. Under test, it reveals a very high degree of composite strength, light weight in proportion to strength, and the stability essential to long, hard, and permanently satisfying service.

GRAPH SHOWING THE PHYSICAL AND MECHANICAL PROPERTIES OF WELL-KNOWN STRUCTURAL CABINET WOODS



Compiled from United States Forest Products Laboratory test data. Numerical test figures for walnut being taken as 100% for ready comparison

WHEREIN THE LABORATORY SPEAKS



THESE two pages seek to make clear by homely means the everyday importance of certain properties of wood. There are many of these properties, which vary widely in degree with different species, and daily play vitally important parts in the twenty thousand uses of wood in industry and the home. Here, by reason of space limitations, but six can be considered.

Designers, architects and woodworking engineers habitually choose woods for their most suitable properties. Thus oak is widely used for flooring because of its hardness; balsa for life-preservers and model airplanes because of its extreme lightness, which is but two-thirds that of cork; and hickory for axe and hammer handles because of its shock-resisting ability. Walnut's use for gunstocks is

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CONCERNING BENDING STRENGTH

Of course it's a regrettable lapse, but people frequently do lean back in fine chairs, and too often in those of delicate design. Such a chair, if made of genuine Cuban mahogany*, might break under the weight of a man of ordinary size. The identical chair in American walnut would provide a wide margin of safety, since it would sustain without breaking the far greater weight of the abnormally tall man, shown at right. Their relative heights (seated as shown) represent the exact bending strength relationship of those two woods.

CONCERNING HARDNESS

In vigorous play the best trained children may bump furniture. Propelled by the child at left the doll buggy hitting a mahogany panel would mar it; whereas a child of the far greater height shown at right would be required to make an identical impression on walnut. Here the comparison is not with substitute mahoganies, but with genuine African mahogany.*

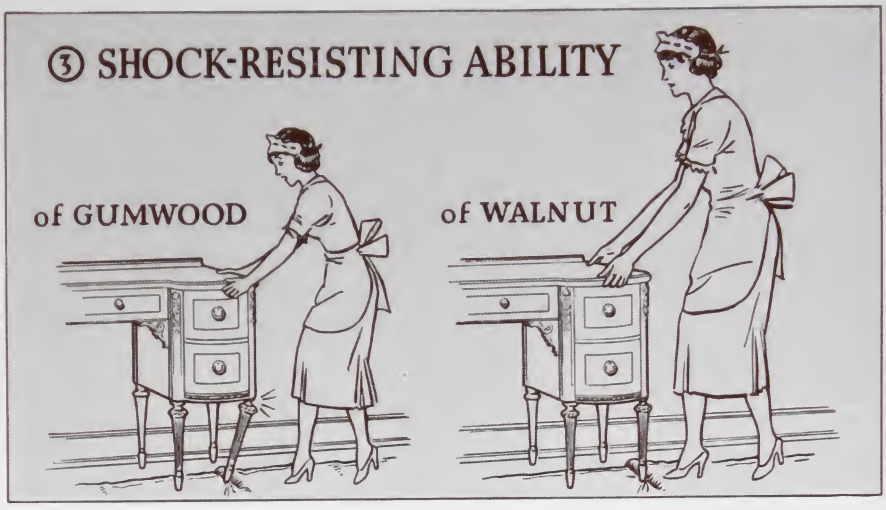
CONCERNING SHRINKAGE AND HYGROSCOPICITY

It is annoying to have cabinet drawers stick or rattle, and expensive to call in a carpenter to refit doors which, although properly hung originally, were made of such species of wood as swell, shrink, or warp easily. To avoid experiences of this kind, choose woods that rate highest in the last column of the chart on page seven.

*—Cuban mahogany *(Swietenia)* differs from African mahogany *(Khaya)* in physical and mechanical properties. In the chart on page 7 the properties of the two species are averaged, as has also been done in the case of birch, maple and

dictated by its union of strength, hardness, light weight, and through-the-wood color with the ability to retain its shape without warping, shrinking or twisting.

Although most home uses demand in structural cabinet woods the combination of strength and stamina with beauty of grain and coloring, the question of walnut's esthetic values is left to other pages. Here we consider only its physical properties, as compared in degree with like properties of other woods commonly used for the same purposes. Comparisons are made pictorially. The resistance of the several woods to each type of stress considered is shown by converting laboratory test figures into units represented by the relative height (not relative mass) of human forms.



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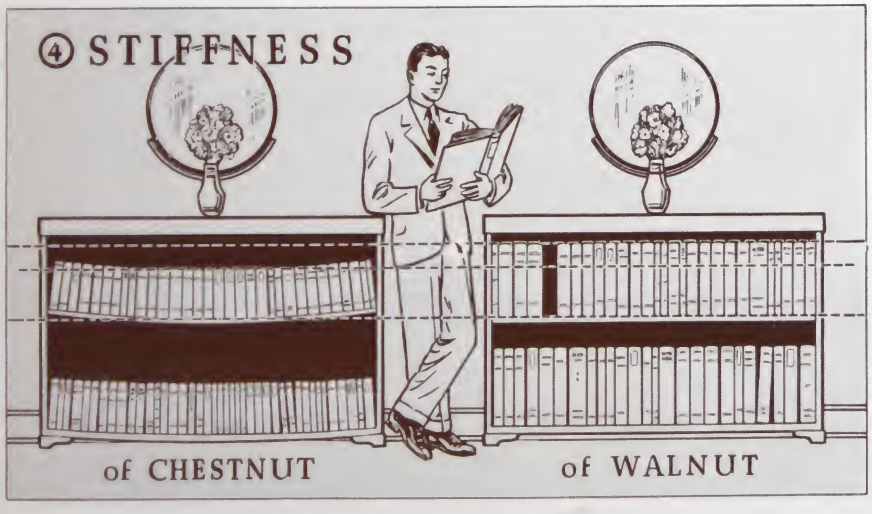
CONCERNING SHOCK-RESISTING ABILITY

Doubtless the maid was careless, but accidents will happen when woods are chosen which lack special strength to resist shock. The difference between two woods in respect of this property is illustrated by the fact that a pull by the giantess shown at right would not have broken a genuine walnut dresser leg identical in size with one which, in gum, might snap at the pull of the normal figure at the left.

CONCERNING STIFFNESS

The property of stiffness is here illustrated by comparing chestnut, a wood commonly used, with walnut, which retains its proper shape even under abnormal loads. For woodwork of fine quality, and for such parts of furniture as must be rigid, a high rating in stiffness is most desirable.



CONCERNING WORKABILITY

The highest rating in certain properties does not necessarily indicate the most desirable wood for every purpose. Thus maple and oak, because of their hardness, make fine floors; but they are actually so hard that carpenters must drill nail and screw holes when installing maple, oak, or birch cabinet work. From the standpoint of workability walnut has an optimum hardness—enough to stand abuse in service, but possessing advantageous working, turning and carving properties.

oak. In these illustrations, each species is given its proper individual rating. Cuban is more widely utilized for structural purposes; while African makes up some eighty per cent of all panel surfaces sold as mahogany.

Ill. 25. Burl Walnut highboy in the style of Queen Anne, America, *circa* 1725.

VENEERS AND PLYWOOD PANELS

"The art of producing and using veneers dates back to the earliest days of civilization, and it may even be looked upon as a standard of human development, since efficient veneering has always followed in the wake of human progress."

—Encyclopedia Britannica

THIS art, so old that it had reached a very high development in Egypt 3500 years ago, was practiced by the ancient Babylonians, Assyrians, Greeks, and Romans. A lost art in medieval Europe, it was revived in the form of inlays during the Renaissance, reached the point of artistic perfection in the magnificent era of Louis XIV, and has been employed by most of the great cabinet makers since that period.

Veneers are thin sheets of wood, sliced or sawn from solid lumber. They are used as the outer faces of plywood panels, and serve three important purposes: they add beauty and interest by revealing handsome effects of figure and coloring which, in the solid wood itself, necessarily remain concealed; greatly reduce the cost of many important types of furniture and woodwork; and, as an integral part of plywood, eliminate warping, checking and splitting in large flat surfaces.

Plywood panels are boards made by gluing together under heavy pressure several thicknesses of wood (five, commonly; but often three, seven, nine, or more) in such manner that the grain of alternate layers runs at ninety-degree angles, as shown in Ill. 27. Modern science has developed glues with a resistance to shearing stress greater than that of solid wood itself, as well as waterproof glues; while the laminated plywood construction equalizes those normal internal stresses of timber which, in the case of wide solid boards, may result in warping or cracking. Thus properly made plywood cannot warp or split; while scientific tests have proved it to be stronger, weight for weight, than a good grade of mild steel.

Veneering opens the door to a world of beauty which without it would remain forever closed. To the effects which can be created with solid woods, it adds a different order of creations, charming and almost infinitely varied. Because the superbly decorative effects created by wood figure, artistically composed and matched, are possible only through use of a series of thin sheets cut from the same piece of wood, veneering greatly widens the scope of designer and craftsman, and greatly adds to the interest and distinction of otherwise unornamented flat surfaces. Illustrations on many pages reveal the artistic possibilities of fine veneering, and picture surface effects which could have been created in no other way.

A practical reason for veneering is that the art conserves the limited supplies of rare woods, and greatly reduces the cost of furniture on which they are employed. The choicest Walnut burls, for example, as you see them mounted on a desk or sideboard, are literally worth more than their weight in sterling silver. To use a wood so precious in thick boards, even if it were strong enough to stand such usage, would be absurdly wasteful.

The impression of some homemakers that veneering is a sorry substitute for solid wood is erroneous; neither the data of the testing laboratory nor the history of furniture sustain it. Both the poorest qualities of furniture, and the finest, can be and are made in either solid or veneered construction. Choice between the two methods may be a matter of personal taste, or of decorative or stylistic usage, or of fitness for particular purposes. It cannot properly be a matter of inherent difference in excellence.

Ill. 26. Present-day dresser in the period of Louis XV, drawer fronts in feather crotch Walnut veneer.

Ill. 27. Photograph showing general method of plywood construction.

PLYWOOD DIAGRAM

A-A: Walnut-veneer.
B-B: Cross-banding.
C: Hardwood lumber core.

The grain of alternate layers is run at right angles to ensure freedom from warping.

Ill. 28. Modern interior with Walnut plywood walls and chromium moldings.

Ill. 29. LEFT: Close-up, "Solid Walnut" table top; Walnut lumber only.

Ill. 30. CENTER: Close-up, "Genuine Walnut," in broadest use of that term; solid Walnut posts and rails, Walnut veneer panels with satinwood borders.

Ill. 31. RIGHT: Close-up, "Combination Walnut", Gumwood post with Walnut veneered panel at right. Note in the Walnut the pores which give depth and character.

SOLID OR VENEERED CONSTRUCTION?

SHOULD one choose solid Walnut furniture, or veneered Walnut furniture? To this question there is no general answer. It is a matter of personal preference, or of fitness for a particular use or style.

By reason of its beauty, strength and stamina, solid Walnut is of course important for such structural uses as chair frames, table legs, and the posts and rails of dressers, sideboards, and other cabinets. Also it is important for all surfaces which are to be embellished with carved, reeded, or fluted ornament.

As to table tops, the flat surfaces of desks and bookcases, and the panels of bedroom and dining furniture, choice between solid and veneered construction is a matter of individual liking. If you feel a special pride in the ownership of solid Walnut pieces, and do not attach great value to those effects of wood figure which can be created only through use of veneers, by all means buy solid Walnut. If on the other hand you take delight in beautifully figured woods, artistically composed and matched, you will choose veneered furniture. In either field the market provides richly varied selections ranging upward to the highest quality.

However, if you do elect to buy veneered Walnut furniture, it is very important to be sure that you are getting what you wish to own and are prepared to pay for, because Walnut veneers are used in two different types of construction of unequal cost and quality. In what is properly known as *genuine Walnut* construction, the flat panels are faced with Walnut veneers, while all exposed structural parts—posts, rails, mirror supports, et cetera—are made of genuine solid Walnut lumber. In the other type, somewhat more common and less expensive, and widely known as *combination Walnut*, the flat panels are likewise faced with Walnut veneers; but the solid structural parts are made of less costly substitute woods, stained to resemble Walnut as closely as possible. Ill. 30 shows a close-up photograph of a genuine Walnut cabinet, and Ill. 31 a close-up of a piece in which Walnut veneers are combined with gumwood.

PROPER DESCRIPTIVE TERMS

SOLID WALNUT

This term is *properly used* to describe articles in which genuine solid Walnut lumber is employed either (a) throughout, as in the case of many chairs, tables, burial caskets, etc.; or (b) in all exposed parts, with other woods used for drawer slides and similar parts not normally seen by the user.

GENUINE WALNUT

This term is *properly used* to describe articles in which Walnut is employed for all exposed parts—that is, posts, rails, and all other exposed structural parts of solid Walnut lumber; with all other surfaces, normally seen by users, of plywood faced with Walnut veneers. (This term permits the use of veneers of other species for inlays, overlays, and similar decorative uses.)

COMBINATION WALNUT

This term is *commonly used* to describe articles in which the plywood panels are faced with Walnut veneers, while the exposed structural parts are made of gumwood, maple, birch, or other substitute woods. A *proper* description would name the principal woods actually employed.

WALNUT FINISH

This term is *sometimes used* to describe articles in which no Walnut is employed, but which are stained to simulate the brown color of genuine Walnut. A *proper* description would name the wood or woods actually used.

Ill. 32. LEFT: Front face of *Solid Walnut* identification tag. Note serial number and seal-lock.

Ill. 33. RIGHT: Front face of *Genuine Walnut* identification tag.

A MEANS TO CERTAINTY

Many furniture manufacturers now use non-transferable identification tags (pictured at left and right), which are attached to their solid Walnut and genuine Walnut products at their plants. Ask for these authoritative tags when you look for furniture.

WALNUT YIELDS AN UNAPPROACHED

FIGURE is to the artist in fine woods what color is to the painter—an indispensable medium of expression. Without it, the furniture you buy today would lack much of its present variety and distinction, while many of what Leonardo da Vinci called "the beautiful things of the world" could never have been created.

The true nature of wood figure must be sought in the mysterious processes of tree growth, a subject too complex for exploration here. For our present purpose it is enough to say that all figure types, however diverse, result from three things: The kind of trees from which the wood is cut; the part of the tree from which it is cut; and the method used in cutting it.

Trees of more than a hundred different species, drawn from the five continents and the islands of the seven seas, are today used in the making of veneers alone; yet altogether there are only some thirty clearly defined figure-types. Certain species yield but one or two of them; others several times as many. Walnut, uniquely rich in this respect, yields twenty-four, including the highly decorative stumpwood obtainable from no other species.

Ill. 35. Conventionalized picture of a Walnut tree, showing sources of the several types of veneers.

Ill. 36. Section of Walnut FEATHER CROTCH showing this wood in the rough, much trimming being necessary to produce the finished product. The crotch veneered panels commonly seen show the wood inverted rather than in its normal position.

Ill. 37. AT RIGHT: A sheet of figured Walnut veneer as sliced from the trunk of a tree, showing full width, including sapwood.

Woodworkers and designers know these figure-types by name. Some bear prosaic titles based upon techniques of manufacture; as half-round or figured rotary. Others, like burl, crotch and stumpwood, are named for the special parts of the tree from which they are cut. A third class of names is loosely descrip-

Ill. 38. A Walnut SWIRL in the rough. These true swirls may develop where either burl or crotch merge with the normal tree structure.

Ill. 39. Walnut BURL veneers. The same wood is seen in finished form in the Modern sideboard at right.

VARIETY OF BEAUTIFUL AND DISTINCTIVE FIGURES

tive—ribbon-stripe, mottle, and moonshine crotch, for example; while poetic fancy has christened such figures as the bee's wing, bird's-eye, plum pudding, angel's step, and butterfly.

The conventionalized drawing at upper left will give you some idea of how the Walnut tree is utilized in making veneers. Stumpwood comes from the bell-shaped base just above the roots, and crotch veneers from the top of the trunk, just below the point where it divides into two great branches. Burls are sometimes found on the bole, as shown in the drawing; sometimes on a limb, as in the case of the "Burl over Washington's Tomb," pictured on page 3, and more frequently at the roots. The true swirls occur near either burl or crotch. All other types, whatever their special names, are cut from the long trunk between stump and crotch, and are generically known as long-wood.

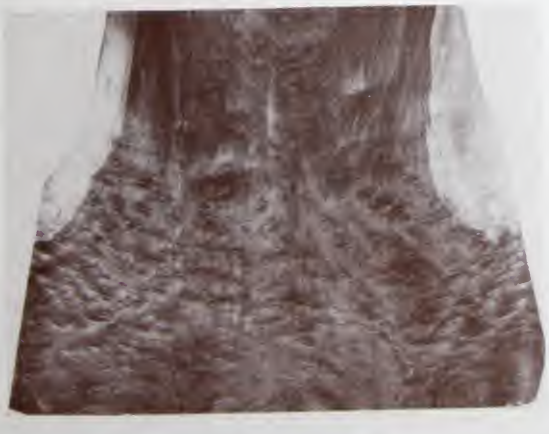
In practice, it would be a most unusual experience to find all of these major types in a single Walnut tree. Every tree suitable for veneering yields long-wood, but only about one in a hundred has a marketable stump. Fine crotches are still more rare, and burls rarest of all.

A very lovely wood is the crotch. It is cut, as mentioned above, from certain Walnut trees at just below the point where the trunk divides into two big limbs. Here the growing fibres, undecided as to which path to take, become inextricably commingled in a figure singularly rich in color, fire and texture. One part, resembling in its play of line a great ostrich plume, is called the feather crotch. Another part, composed of delicate and elusive swirls, is known as the moonshine or moon crotch; and sometimes, in the wood-using industries, as the Walnut swirl.

Ill. 36 shows a cross-section of a small feather crotch, as the wood is cut into thick slabs for the manufacture of *de luxe* gunstocks, while the figure is shown in the form of matched veneers in Ills. 43 and 26.

Ill. 40. Two consecutive sheets of FIGURED SLICED Walnut veneers, opened and matched like the pages of a book.

Ill. 41. Intricately FIGURED STUMPWOOD, or BUTT Walnut, in the form of raw veneer.



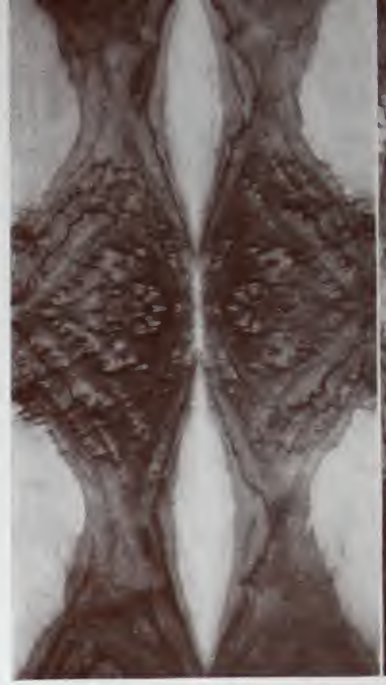
Ill. 42. Walnut sideboard in the Modern style. The center panel is of matched STUMPWOOD, and the side panels of QUARTERED SLICED wood and BURL in alternate bands.

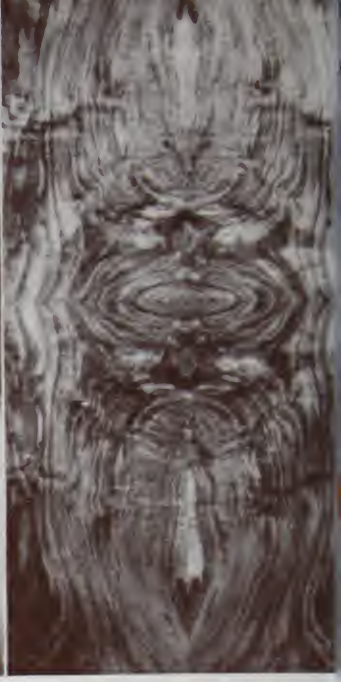
AT LEFT:

Ill. 43. TOP: The FEATHER CROTCH in American Walnut; two pieces, matched.

Ill. 44. CENTER: The MOONSHINE CROTCH, two pieces, matched.

Ill. 45. BOTTOM: Walnut BURL in an effect produced by matching four pieces.





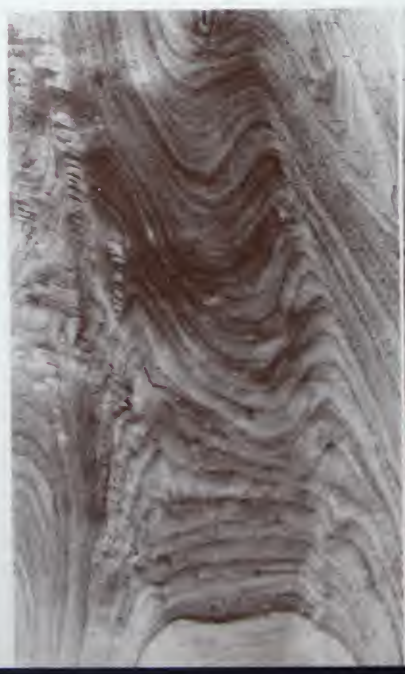
Ill. 46. Walnut STUMPWOOD showing differences in tone between natural heart and sap color; 4-pieces, book-and-end matched.

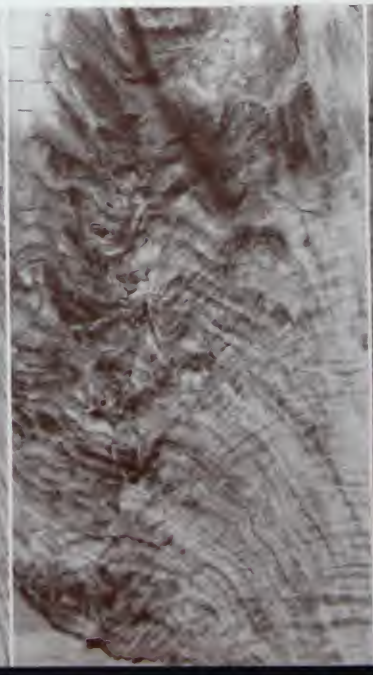
Ill. 47. FIGURED STUMPWOOD, book-and-end matched.

The moonshine or swirl crotch is pictured in the form of raw veneers in Ills. 48 and 49—the first in "plain" and the second in "figured" form; and as a matched panel in Ill. 44. The true swirl, which is cut from freak excrescences sometimes found on the trunk near either burl or crotch, is shown in raw veneer form in Ill. 38.

Walnut burl veneer is described by the Britannica as "one of the most valuable woods in the world on account of the extraordinary beauty of the wavy, rippled and variegated figure." The burls, great wart-like excrescences found on the bole, a limb, or at the root of an occasional tree, are made up of myriad tiny buds, which botanists think are rushed out by the tree in the effort to repair an external injury. Burl veneer is shown in the raw state in Ill. 39, and as used in furniture in Ills. 42, 45 and 25.

Stumpwood, also commonly known as Butt Walnut, is a highly decorative and very popular figure type found in no other species. Its use in furniture, interior woodwork, musical instruments and office desks is freely illustrated in later sections of this book. A sheet of finely figured stumpwood is shown as it comes from the veneer lathe in Ill. 41, and as trimmed for use in Ill. 50. Ills. 46 and 47 picture





AT RIGHT:

Ill 48. LEFT: PLAIN Walnut SWIRL, one-piece.

Ill. 49. CENTER: FIGURED Walnut SWIRL, one-piece.

Ill. 50. RIGHT: Part of a single sheet of FIGURED STUMPWOOD.

matched effects in stumpwood, and Ill. 66 shows a picturesque design produced by matching a freak figure of this highly versatile wood.

Between stump and crotch is the long trunk, which yields many figure types in veneers whose characteristic patterns depend in part upon wood-grain, and in part upon whether they are cut by one or another of four general methods.

The method most commonly employed is slicing. Here the logs are first cut into lengths of sixteen feet or less, that being the extreme length of a veneering knife. Each length is then divided into two or more sections, known as flitches, which are boiled for many hours in the steam vats to soften their hard fibre for cutting. In the "straight sliced" method, the logs are cut lengthwise through the middle, and the halves, after preparation, are moved by machinery of micrometric accuracy against the slicing knife, which thus cuts entirely across the log from one side to the other. Some rare and costly logs have a peculiarly intricate growth structure, and yield the "figured sliced" wood typified in Ills. 37 and 51, and shown in use in many other illustrations. Most logs, however, lack this intricate configuration, and yield the "plain sliced" types pictured in Ill. 52.

Two other figure types are produced by first flitching the log into quarters in such manner that the knife cuts across the annual growth-rings to yield a banded wood known as ribbon-stripe or pencil-stripe—the latter when the tree's growth was slow, and the annual rings narrow; the former when growth was rapid and the rings wide. A California Walnut, commonly known as Claro and pictured in Ill. 56, grows so rapidly that the annual rings sometimes reach a width of one-half inch. When quartered, an unfigured log yields the "plain quartered" veneers shown in Ills. 53 and 64; and a figured log the "figured quartered" veneers pictured in Ill. 54.

When veneers more than sixteen feet long are required they must be sawn; and there is also a considerable production of thick sawn Walnut veneers for doors, as pictured in Ill. 61, and for pianos and other special uses. However, slicing is employed wherever practicable; not only because it is faster, but also because it saves all of the valuable lumber destroyed by the saw in the form of saw dust.

Ill. 51. TOP: A MOTTLE figure as it appears in FIGURED SLICED Walnut (longwood).

Ill. 52. CENTER: Matched Walnut veneers sliced from an unfigured log, and known as PLAIN SLICED (longwood).

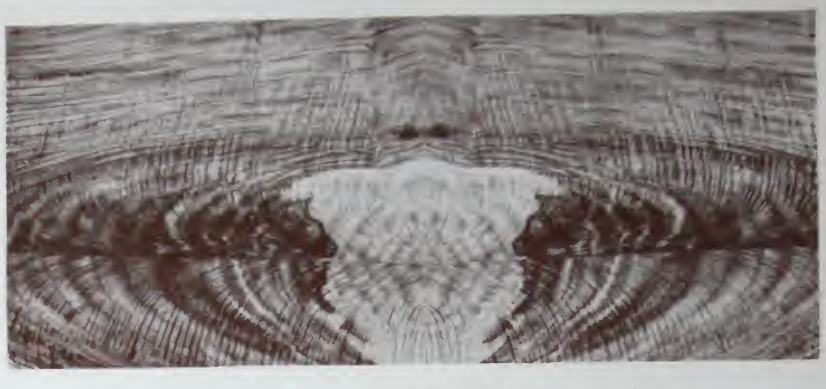
Ill. 56. BOTTOM: Single sheet of FIGURED ROTARY Walnut veneer.

Ill. 53. The MOTTLE figure in QUARTERED SLICED Claro.

Ill. 54. The pencil stripe figure in PLAIN QUARTERED Walnut.

Ill. 55. FIGURED QUARTERED SLICED veneer; four-piece book-matched.

Ill. 57. PLAIN HALF-ROUND Walnut veneer in a two-piece matched effect (two successive sheets, opened pagewise).



Ill. 62. Claro Walnut matched CROTCH showing heart and sap.

Ill. 55 shows a figure type produced by a totally different method. Here the logs are not halved or quartered, but are mounted at their centers on a huge lathe and rotated against the knife, which thus pares off the veneer into continuous sheets, like unrolling wrapping paper. Unfigured logs yield "plain rotary" veneers, shown in Ill. 59, in which the pattern is produced solely by the knife's movement across the growth rings. "Figured rotary" can be cut only from figured logs, and is therefore rarer and more costly. It is pictured in use in Ills. 55 and 115.

By the "half-round" method, veneers are also produced on the rotary lathe, but with this important difference: The log or flitch is set off-center, so that the knife cuts it during only about one-third of each revolution, thus passing obliquely across the annual rings, instead of following them as in rotary, to produce the distinctive "half-round" figure shown in Ill. 57.

After cutting, the veneers of each flitch are trimmed, and then sent to the dryer—a huge machine with delicate heat and speed controls which must be correctly set for each type of wood. Later inspection, grading, sampling and crating completes the cycle of production. The raw veneers are ready for marketing, and for the ensuing cycle of fabrication into finished products.

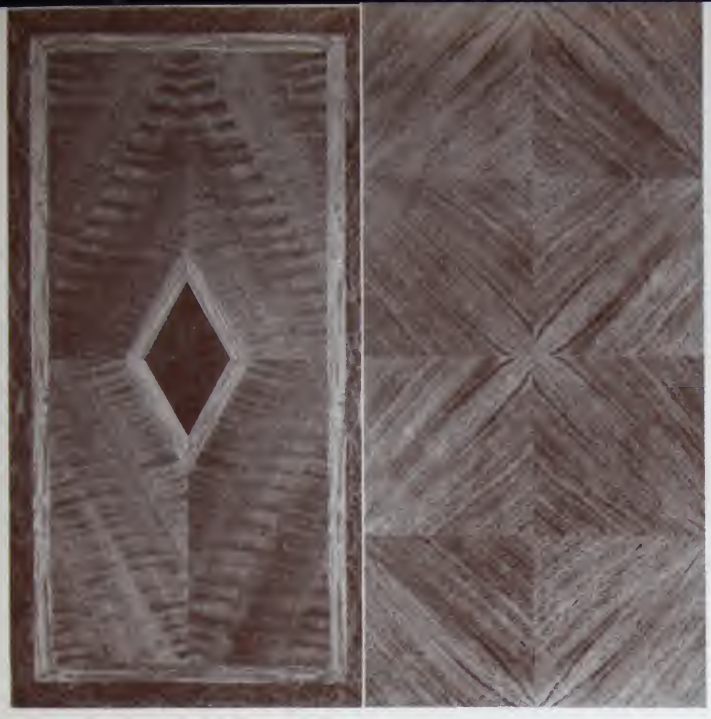
So much for the ABC's of veneer-making. Beyond this over-simple explanation there is of course a complex art, whose practice demands much knowledge and experience,

Ill. 58. LEFT: PIN-KNOTTY SLICED longwood; photographed in a four-piece book-matched panel.

Ill. 59. LOWER, LEFT: PLAIN ROTARY; two-piece book-matched.

Ill. 60. FREAK FIGURE in Walnut longwood; dog's head in a prominent banker's office, described by him as his watch dog.

Ill. 61. SAWN WALNUT veneer 3/16" thick is used for the top rail (A) and stile (B) of this door. The panel is of 1/28" FIGURED HALF-ROUND, matched; while the molding and door casing are of solid Walnut lumber.



Ill. 63. QUARTERED SLICED Walnut, diamond matched, with borders of redwood burl and satinwood.

Ill. 64. Sixteen pieces of QUARTERED SLICED Walnut form this panel. The two-piece sections are combined in such a way that each four form a square at either end, and a reverse square in the center.

and many delicate skills. It is this art which makes the whole process of veneer manufacture a fascinating melange of modern industry and old craftsmanship. The uninitiate, visiting a veneer plant, can see the tall cranes, spinning saws and great power-driven machines. What he cannot see is the uncanny skill that enables men to look at a solid log or bark-covered Walnut stump and know in advance, with assurance, just how to get out of it the utmost measure of beauty and distinction.

It is this skill that counts, for it prepares the way for the later arts of the designer and the furniture craftsman, who in imagination see woods as pictures, and by this power transform the infinitely varied "thin leaves of wood" which we call Walnut veneers into forms of enduring loveliness.

Ill. 68. Section of wall paneling showing the Cathedral effect in FIGURED SLICED Walnut. The stump end is inverted and book-matched to form a pointed arch.

Ill. 67. The BASKET-WEAVE design; made of QUARTERED SLICED Walnut veneer. The use of this design is illustrated in Ill. 97.

Ill. 65. The FIDDLE-BACK figure; QUARTERED SLICED veneer, two-piece book-matched

Ill. 66. FREAK FIGURE in STUMPWOOD, matched to resemble a monkey's face; two-piece book-matched.

Ill. 70. EARLY GEORGIAN: A finely appointed living room in American Walnut.

PROCESSION OF THE FURNITURE STYLES

THE 20th Century homemaker is literally "the heir of all the ages." All that the past can teach us of materials and craftsmanship, augmented by a host of new materials and new techniques, is utilized today for her advantage. Innumerable lovely forms and ornamental motifs, the heritage of centuries of artistry, enrich the furniture and fabrics that await her selection in the shops. A long procession of historic styles, re-created by contemporary designers to fit today's needs, vie with Modern and non-period furniture to offer her an almost limitless range of choice.

What we now call the historic or period styles are, so to speak, cross-sections of the decorative practice of a given people at a given period of their history; or, more accurately, cross-sections of the practices of courts and aristocracies, since the common people rarely counted in style developments. The procession of such styles as are now of more than antiquarian interest began with the Italian Renaissance in the 15th century, and ended in the early 19th, with the advent of machine industry.

Historically, of course, there were scores of these styles, which waxed and waned with the changing currents of European and Colonial life. In their original form, as vestments of the life of their time and place, all have long since gone the way of farthingales and powdered wigs. A few, however—some nine or ten of English origin, five or six from France, eight or nine from Italy, Spain, Germany and America—have been revived, re-vamped, and for the most part renamed, and now play parts of varying importance in the homes of today. Together they constitute the so-called "traditional" styles, as distinguished from Modern, and from designs not drawn directly from historic sources.

It must not be supposed that the wells of creative imagination ran dry a century ago, or that present-day traditional furniture merely apes the past. To be sure, there are many exact reproductions of historic pieces; but there is also a vast amount of original designing, including not a little of the highest order. Drawing thematic material from earlier sources, as did Shakespeare and Goethe, Wagner and Tschaikowsky, the best men of our time are today creating masterpieces which in beauty of proportion, grace of line, and true imaginative power rival the finest work of any era.

For an account of Walnut's place in the procession of historic styles, the reader must turn to the many finely illustrated books to be found in any library. It is a very long story, which we can only hint at on the next page.

PAGE 18

Ill. 71. FRENCH RENAISSANCE: Burgundian Armoire of the 16th Century, in Walnut. Pennsylvania Museum of Art.

Ill. 72. EARLY AMERICAN: Walnut crib used by sixty-two babies, and still in use.

Ill. 73. MODERN: Combined serving table and tea-wagon, in Walnut, glass and chromium.

1500 A. D. HISTORY IN TABLOID 1936 A. D.

16th CENTURY: Modern era of history begins. Age of Discovery: Exploration and conquest in the Americas; sea-borne commerce with the Orient. Period of the Protestant Reformation. Decay of guild system and beginnings of free competitive industry. Splendid achievements in the arts, philosophy, and sciences: Shakespeare and Rabelais, Michelangelo and Titian, Bacon, Copernicus and Galileo.

FURNITURE: Italy the style source. Forms dominantly massive and rectilinear; of great magnificence in Italy, Spain and France, cruder in England; richly carved in Italy, France and England. Walnut the chief wood except in England, where it was rare and precious; heavily planted during reign of Elizabeth.

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FRENCH STYLES

Francis I. 1515-1547
Style: **Francis I (François Premier).**
The 16th Century was the high period of the French Renaissance.

Henry II. 1547-1559
Style: **Henry II (Henri Deux).**
No significant changes from preceding style.

Henry IV. 1589-1610
Style: **Henry IV (Henri Quatre).**

ENGLISH STYLES

Henry VIII. 1509-1547
Style: **Tudor Gothic.**
Growing infusion of Renaissance influences.

Elizabeth. 1558-1603
Style: **Elizabethan.**
High period of the English Renaissance.
The Elizabethan style remained dominant until near the end of the reign of James I.

17th CENTURY: Period of dynastic and religious wars in Europe; exploration and permanent settlements in the New World; the mercantile system in economics. Age of Milton, Bunyan, Dryden, Pepys and Locke, Lope de Vega and Calderon, Corneille, Moliere and Racine in literature and drama; of Velasquez, Rembrandt and of Emanuel Bach. Circulation of the blood demonstrated by Harvey, 1616. First English newspaper, 1663; first in America, 1694.

FURNITURE: France attains style leadership; general period of the Baroque influence. Walnut fashionable throughout the century in the French, Italian, Spanish, Dutch and Flemish styles, and in England after the Restoration in 1660, when trees planted in preceding century reached maturity.

Louis XIII. 1610-1643
Style: **Louis XIII (Louis Treize).**

Louis XIV. 1643-1715
Style: **Louis XIV (Louis Quatorze).**
Known as "Louis the Magnificent" and the "Sun King" (le Roi Soleil), Louis XIV was a great patron of the arts, and inspired the creation of very sumptuous furniture.

James I. 1603-1625
Style: **Elizabethan**
James was the first of the Stuart dynasty, which ended with the reign of James II.

Charles I. 1625-1649
Style: **Jacobean.**

The Commonwealth. 1649-1660
Style: **Cromwellian.**

Charles II. 1660-1685
Style: **Carolean.**

James II. 1685-1688

William and Mary. 1688-1702
Style: **William and Mary.**

18th CENTURY: Era of Balance of Powers. Territorial struggles in America; rise of Russia and Prussia; many wars; American and French Revolutions. Beginnings of the Machine Age—steam engine, spinning jenny and power loom, Franklin's experiments in electricity. Golden age of European literature, philosophy, and music—Goethe, Schiller, Kant, Voltaire, Gibbon; Bach, Handel, Haydn, Mozart, Beethoven; Watteau, Boucher, Reynolds among the painters.

FURNITURE: France dominates styles, throughout shift from Baroque to Rococco to neo-classic forms. Walnut fashionable in Italy, Spain and the Low Countries, and in styles of the Regency, Louis XV, Louis XVI, Queen Anne and Early Georgian periods.

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Louis XV. 1715-1774
Style: **Regency (Regence).**
Extreme type of Rococco.
Style: **Louis XV (Louis Quinze).**
Rococco influence dominant until middle of century, when it gave way to the new classic style which now bears the name of the succeeding monarch.

Louis XVI. 1774-1793
Style: **Louis XVI (Louis Seize.)**

The Revolution and the Directorate
Style: **Directory (Directoire).**

Anne. 1702-1727
Style: **Queen Anne.**

George I. 1714-1727

George II. 1727-1760

George III. 1760-1820
Styles:

Early Georgian 1720-1740

Middle Georgian 1740-1765

Late Georgian 1765-1805
Individual styles:
Chippendale; furniture style.
Adam; architectural and decorative style.
Hepplewhite; furniture style.
Sheraton; furniture style.

19th CENTURY: Period of the Napoleonic wars and subsequent development of nationalism; European conquest and expansion in Asia and Africa; rise of modern science. Enormous advances in machine industry, communications, commerce, medicine and popular education. Age of the railroad, steamship, telegraph, telephone, dynamo, perfecting press, and of revolutionary changes in agriculture. Century of great names in science, industry, statecraft, literature, music and painting.

FURNITURE: A sterile century, starting with the made-to-order Empire style; followed by unimportant developments in France and Germany, the Victorian age in England, and the "black Walnut" period in the United States; ending here with a return to the past (period decoration), and in France with *L'art nouveau.*

Napoleon I. 1804-1815
Style: **Empire (l'Empire).**
The later styles of the Restoration and the Third Republic are of no practical interest.
Influenced by Japanese decorative art, the New Art movement was launched in France at the end of the century. It failed of popularity, but contributed to the later development of the Modern style.

Sheraton's work in England, Phyfe's in the United States, carried over into the first decade of the 19th Century; and thereafter the Empire style, in English and American interpretations, remained dominant until the 1830's.

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20th CENTURY: Period of national rivalries and the Great War; of political and social revolutions, the decline of democracy, renewed rivalries, world depression, unrest in Asia. Era of triumphant progress in pure and applied science and the healing art. Age of the motor car and modern roads, aerial navigation, Diesel engine, streamline trains, buses, subways; of the radio, cinema, air-conditioning; low-cost newspapers, magazines, books, adult education.

FURNITURE: Purely eclectic period, without international style leadership. Taste is improving, and the trend is toward greater beauty and distinction in furniture, and greater fitness for the needs of contemporary life. Walnut is very widely used in both traditional and modern styles.

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Ill. 75. LEFT: Carved Walnut chest in the style of the Italian Renaissance.

Ill. 76. CENTER: Reproductions of Queen Anne commode and Italian mirror; in Walnut.

Ill. 77. RIGHT: Corner grouping, style of early 18th Century England; in Walnut.

FURNITURE OF TODAY: TRADITIONAL AND MODERN

IMAGINE for a moment that you are a wealthy citizen of the London of Queen Anne, the Paris of Marie Antoinette, or the Philadelphia of the Continental Congress, and that you wish to purchase furniture for your dining room.

Setting out by sedan chair or carriage for the shop of a fashionable cabinet maker, you will be greeted by its proprietor in person, shown his books of designs, and invited to make a selection. Your choice will be restricted to such patterns as the master considers to be currently in fashion. The woods will be such as he has on hand or can easily secure. The price will of necessity be high. You conclude the purchase, and months later your furniture will be delivered.

Step back into your own age, and you confront a situation so sharply different that the 18th Century could not even have imagined it. A great industry, linked in a chain which reaches from the remotest forest to your very doorstep, stands ready to serve you instantly. Is new dining room furniture in question? Visit any one of several easily accessible stores and you can inspect at leisure a rich assortment of suites, related groups, or individual pieces. You will find a whole gamut of styles, many handsome woods, a wide range of prices based, at every level, upon the economies of 20th Century engineering and production methods. Wealthy or otherwise, you choose what you like, and two days later it will be installed in your home.

Never before, in any time or place, has it been so easy to acquire the furniture essential to an attractive and comfortable home. This is true for the most magnificent houses; and happily it is even more true for the most modest. In furniture, as in so many other fields, American industry has since the Great War bent its energies toward the solution of a problem never before conceived as solvable—the problem of harnessing the machine to the uses of beauty, and of joining fitness and real worth with low cost.

Those who deplore the machine, and lament the passing of the old-time craftsman, know too little of how good furniture is made. In truth the old craftsman is present still, in person, and the old skills are utilized and honored, in every department of every plant where worthy furniture is built today. The real difference between past and present is that the modern craftsman, like the modern housewife, has been freed from drudgery. Cunningly-devised machines, working with far more than human speed and accuracy, release his energies for the special work which he alone can do. Compute what it would mean in terms of added cost if all of the eleven to fifteen hundred separate operations involved in the making of a bedroom suite had to be performed by hand, and you will see the machine for what it is in fact—a beneficent *jinni* without whose tireless labors most of us would live in very sparsely furnished homes.

Ill. 78. LEFT: Walnut kidney top knee-hole desk and lacquer chair; 18th Century English.

Ill. 79. CENTER: Reproduction, late 17th Century English chest of drawers; Walnut and Marquetry.

Ill. 80. RIGHT: Reproduction of a late 17th Century English Walnut chair.

Ill. 81. A group of Walnut reproductions with harmonious decorative accessories.

Ill. 82. Paneled Walnut walls give unity to a room equipped with furniture of several styles and finishes.

The first impression of one who surveys the whole field of present-day furniture is that of almost bewildering variety. Ours is an eclectic age, and furniture makers and merchants work on the principle that the American homemaker must have what she wants when she wants it. Thus the shops present an exciting range of choices. The style parade spans four centuries from Renaissance to Modern. Color makes the whole swing of the chromatic circle. Fabrics and finishes are astonishingly varied. New materials have been developed by the laboratories, old materials brought from the ends of the earth. Everywhere there is experiment, novelty, the leaven of change and growth.

Beneath the shifting surface, however, there are signs of a strong undercurrent. In matters artistic America is coming of age, and the current is toward the kinds of furniture which, whatever style names they may bear, best meet the needs and suit the tastes of contemporary American life.

Just now, for example, our two leading schools of design profess allegiance to opposing principles. Traditionalists on the one hand cling to the forms and motifs of the past, in the conviction that nothing lovelier or more fitting can be devised; while on the other hand the Modernists reject tradition, in the conviction that only through new forms can furniture express the directness and dynamism of modern life. Yet to the observer the differences that divide these schools seem less significant than their common purpose, which is to provide suitable and pleasant backgrounds for the life of their own day and their own people.

Thus the trend in Modern furniture is toward more gracious, livable qualities. There is a shift in emphasis from the severity of straight lines and angular contours toward yielding curves; from exotic woods and striking hues toward more familiar woods and mellower coloring; from the uncompromising simplicity and bareness of the earlier functionalists toward a larger measure of enrichment; and from excessive concern with European modes and models toward sole concern with what Americans will accept and like.

The same force is influencing the direction of traditional design. Here there is less interest in the details of period practice—which after all was the practice of

"The high estimation in which old English Walnut furniture is held at the present time is undoubtedly due to the appreciation of its artistic design and form, the natural beauty of the Walnut wood with its fine figure and grain; and the beautiful colour and patina which it has acquired by age. It is this variety of qualities, combined with the high standard of workmanship which prevailed throughout the Walnut period, that entitles Walnut furniture to be considered as the most artistic that England has produced."

— From "Old English Walnut and Lacquer Furniture" by R. W. Symonds.

Ill. 83. The Victor Lawson Memorial Room; Directors' Room of the Chicago Daily News; walls and furniture of Walnut.

"It is often said that the cocoanut palm of the South Seas is the most useful tree to man, supplying as it does almost every human need. Granting this to be true, then surely Walnut deserves to be placed second, for it has served each of its varied uses so admirably that for centuries it has been known as the 'tree of gods and kings.'"

—From "From Forest to Furniture" by Malcom H. Sherwood.

Ill. 84. A living room of today; Walnut furniture in 18th Century French and English styles.

an alien people and a bygone age—and more interest in the details and deeper currents of American home life as it is lived today. Thus we borrow from the past what is beautiful and useful, but reshape it in new forms, and very often in new materials, to meet the needs of a new age.

That Walnut plays a most important part in present-day furniture, both traditional and modern, is too well known to need emphasis. Serving with distinction the needs of our own, as it served those of earlier centuries, it is employed in furniture of almost every type and style, from the magnificent reproduction of a 16th century Italian *credenza* to today's latest, smartest Modern coffee table.

For this broad use there are the general reasons discussed in earlier pages—among them the weight of historic prestige, the moving appeals of texture, figure and coloring, and the circumstance of notable strength and stamina. In addition there are two special reasons which weigh heavily in the preference of homemakers. One is that Walnut, being especially easy to care for and to keep in fine condition, lightens the burdens of housekeeping. The second is that the wood is above all congenial and pleasant to live with. Sunny and serene in aspect, and of heirloom quality, it is as perfectly at home in the simplest as in the most sumptuously furnished room.

While decorative process is a subject far too bulky and complex for treatment here, a few general considerations are set down for what they may be worth.

Walnut's natural coloring is light, warm, and so nearly neutral as to be harmonious with the entire gamut of hues. In tone (degree of light and dark) it belongs in the mid-range, and can be used against either light or dark backgrounds without the effect of abruptness and disunity caused by strong tone contrast. It is unpleasing (as are practically all furniture finishes) against the cold carbon grays, whether light or dark.

A piece of Walnut furniture will appear least striking against a background of the same hue and tone; more striking against a background which is either lighter, darker, or of a different hue than itself; and most striking against black or white.

Against a background lighter than itself, Walnut furniture will appear darker, with this effect increased in the degree that the background tone approaches white; while against a background darker than itself it

Ill. 85. Solid Walnut furniture of 18th Century American inspiration.

Ill. 86. Queen Anne folding card table in Walnut.

Ill. 87. Contemporary Walnut love seat; style source late 17th Century English.

Ill. 88. Partial view of a French P vincial bedroom suite; in Walnu

Ill. 89. A modern grouping, Walnut furniture and woodwork.

Ill. 90. The desk is Walnut, and the bookcase before the window of Walnut contrasted with light figureless wood.

Ill. 91. Modern in a Continental mode, Walnut furniture and walls in the Recreation Room of the S.S. Bremen.

will appear lighter, with this effect intensified in the degree that the background tone approaches black.

Walnut furniture is equally effective against plain, self-toned, or multi-colored backgrounds; provided that the latter are not so strong as to throw into eclipse either the handsome figure of the wood or the details of the design. Assuming proper care in the selection of wall coloring and texture, this is true whether the furniture is in figured veneers, or richly carved, or without surface ornament.

In using several furniture woods in the same room, the general requirement is that the finished room must not lack unity; that is, elements of likeness in the furniture must be more conspicuous than elements of unlikeness. Thus oak and satinwood are too sharply unlike in both tone and texture to be harmonious. Walnut stands midway between these extremes, and can be used harmoniously with either.

In combining furniture of several styles, unity again demands that the room as a whole reveal a satisfying degree of likeness; primarily through similarities of line and proportion, and in less degree through echoed colors, textures, and ornamental detail. Thus Queen Anne furniture is harmonious with Chippendale's most characteristic work because of similarities in line and proportion, despite the difference in ornament and in elaboration of detail; whereas Jacobean or Early Colonial furniture is inharmonious with the styles of Sheraton or Louis XVI, because their differences in proportion and line are so marked as to outweigh their few points of resemblance.

Concerning the matter of ornament in furniture, the general esthetic law is that, considering the room as a whole rather than its details, emphasis upon plain surfaces as opposed to ornamented makes for fineness and delicacy of effect; and if carried too far, for thinness and decorative impoverishment. Emphasis upon ornamented surfaces, as opposed to plain, makes for richness and breadth of effect; and if carried too far, for complexity and confusion.

Ill. 92. Partial view of a contemporary bedroom, furniture in Walnut.

Ill. 93. Walnut finely expresses the spirit of gracious hospitality. Dining suite in the style of Queen Anne.

Ill. 94. View of one corner of a room in Walnut.

DISTINCTIVE AND ENDURING WOODWORK

INTERIOR woodwork is a part of architecture which touches everybody. Its appearance is certain to influence for good or ill the beauty and distinction of every room. Its behaviour in service is no less certain to diminish or increase the work and worry and expense of every household. Esthetically and practically, choice of both the material and the finish for interior woodwork is a matter of first-rate importance.

While the general problem of the architect, here as elsewhere, is to unite beauty and utility, his solutions must in practice fit the varying requirements of three different situations. In *de luxe* architecture, typified by the new Post Office Department Building and by the living room pictured in Ill. 70, the sole objective is beauty and distinction, and neither first cost nor maintenance expense need be seriously considered. In office buildings on the other hand, as in hotel and apartment house work, the first objective is an operating profit on a carefully studied investment, and the woodwork must be chosen with that end in view.

The home presents a third situation. Here beauty, distinction, and the satisfaction of personal tastes are important; but so are first cost and upkeep expense, whether the latter be measured in wages paid or in the daily labor of housekeeping. Even the investment factor must be taken into account. It is this situation that will be considered in what follows, both because *de luxe* and commercial interiors have been treated elsewhere (see reading list, page 37), and because this story is written first of all for the homemaker.

Interior woodwork varies greatly in character and decorative importance. In many rooms it consists only of doors and trim—that is, window and door casings, baseboard and moldings, cornice or picture molding, *et cetera*. In other rooms it may include hardwood flooring, mantel, stairway, built-in fitments, dado or full paneling, and beamed ceiling. In practice the choice of materials is very often between paint and American Walnut.

Ill. 95. UPPER LEFT: The Field Building, Chicago; interior woodwork of American Walnut throughout.

Ill. 96. CENTER: Entrance hall in American Walnut. The carved stairway is a copy of the famous Grinling Gibbons stairway at Cassiobury Park, estate of the Earl of Essex.

Ill. 97. LOWER LEFT: California living room paneled with quartered Walnut veneers in basket-weave design and corner inlays of Walnut burl.

Ill. 98. RIGHT: Winding stair of solid American Walnut, photographed from above.

Ill. 99. LEFT: Walnut doors, Chamber of Commerce of the United States.

Ill. 100. CENTER: An example of Walnut's wide use in church architecture.

Ill. 101. RIGHT: Corner of a library, showing panels of knotty Walnut.

As respects housekeeping labor and expense, the advantages lie heavily with Walnut. Its first cost is greater, although the difference is offset by the higher investment and resale values which the use of a fine hardwood creates. Maintenance costs, however, are extremely low. Walnut woodwork is always in presentable condition. It does not deteriorate in service, nor does the housewife need to worry about what the children may do to it. As compared with paint it requires little attention and far less drudgery, and the annoyance, confusion and odors inseparable from frequent repainting are unknown. While upkeep and renewal costs will vary for each household, they are at best considerable if painted woodwork is kept in fine condition. Here is the operating experience of the world's largest hotel:

FOR PAINT

Maintenance cost per room is 28 cents a week for maid's time; plus $1.50 every three months for the time of a wall washer to clean the painted woodwork; plus $8 to $10 every two years for repainting—about $250 in ten years, per room.

FOR WALNUT

Semi-annual polishing with cloth, $3 per year; then, after nine years of service, a thorough cleaning and one coat of dull lacquer, $12—a total of $42.

Esthetically, the first function of the woodwork is to give a room definition, unity, and the qualities of stability and repose. This it does by providing, so to speak, a bony structure—by framing the walls and openings with straight lines, of which the verticals create effects of life and support; the horizontals of tranquillity and repose; and all long lines, of dignity.

In paneled rooms, whether large or small, there is no need to emphasize these structural lines by contrast. Unpaneled rooms require this emphasis, and it is provided by contrast in texture, hue or tone between woodwork and walls. In general, this contrast will be more marked in the degree that the room is large, thickly furnished, and rich in variety of color and texture. The principle involved may be tested by trying the effect of a narrow, flat wooden frame against a big, richly colored oil painting, and a heavy carved frame against a small etching.

For a small room, delicately and somewhat thinly furnished, and with inconspicuous walls of smooth texture, painted woodwork is structurally adequate and charming. For larger rooms, in which the effect of delicacy is neither desired nor achieved, paint is weak, and Walnut is to be preferred on purely esthetic grounds. Of course this does not mean Walnut which has been so darkened by a stain as to stand out sharply. It means the wood in its natural coloring—a soft warm neutral

Ill. 102. Corridor in the office of the Postmaster General of the United States; walls and ceiling of American Walnut.

American Walnut is very widely employed for public buildings and monumental interiors. Its use in Federal, State, and Municipal buildings, in courtrooms, churches, schools, and libraries, and in hotels, theatres, stores, and commercial office buildings, is not discussed in this Story.

Ill. 103. Theatre interior in American Walnut.

Ill. 104. LOWER, LEFT: Apartment in the Modern style; walls paneled with figured Walnut, matched horizontally.

Ill. 105. CENTER: Carved Walnut doors.

Ill. 106. RIGHT: View of a church interior; solid Walnut woodwork and furniture.

whose quiet strength is revealed as much by contrasting texture as by hue and tone.

In addition to the part it plays in the unity and beauty of a room considered as a whole, interior woodwork is to be judged by its own beauty or lack of it. Beauty springs from diversity in unity; monotony is an unesthetic quality. The flat surfaces of doors, paneling and trim, seen without reference to the designs in which they are embodied, can have intrinsic beauty only insofar as they have a varied texture and the gradated color which such texture ensures. "It does not matter," wrote Ruskin, "how small the touch of color may be . . . if one part of it is not darker than the rest it is a bad touch; for it is not merely that the natural fact is so, that your color should be gradated; the preciousness and pleasantness of the color itself depends more on this than on any other of its qualities; for gradation is to color just what curvature is to line, both being felt to be beautiful by the pure instinct of every human mind."

A further artistic advantage possessed by Walnut, in comparison either with paint or with most other hardwoods, is that its texture permits the application of finishes which are in harmony with widely different architectural and furniture styles. The esthetic principle involved is mentioned on page 36.

Finally, there is the question of historic precedent. Is it necessary, if one is to have a house whose exterior design is derived from an earlier era and perhaps from another land, to copy the interior woodwork of that time and place?

The Modernist would brush this question aside impatiently, or counter with an inquiry as to whether or not the house were to have bathrooms, electric light, and central heating, and doubtless a man from Mars would find it highly diverting. However, neither the Modernist nor the man from Mars is competent in this matter. Only those who are to live in the house can judge whether a yes or no answer will, over the years, give them greater satisfaction.

On purely logical grounds the answer would, of course, be no. Many people of our day sleep in four-poster beds, but not on rope supports and feather mattresses. They use modern bedding because they wish to sleep in comfort. So it is, or should be, with interior woodwork. If the historic materials and modes please the eye and involve no serious loss in comfort or convenience, reason would use them; otherwise it would use something better.

Both the decorative and the practical values of hardwood floors are too well known to require discussion. American Walnut is widely used for fine floors, particularly in parquetry, pegged plank, and other stylized forms. An entirely new type of flooring, marketed under the proprietary name "Parkay," and pictured in Ills. 149 and 28, can be installed, completely finished and ready for use, in a few hours. Designed in a small parquetry pattern, pre-finished, and made of genuine solid Walnut, oak or teak, "Parkay" floors can be laid as quickly, and with as little interference with household or office routine, as a good linoleum, and at no greater cost.

WALNUT WOODWORK FOR HOMES OF MODERATE COST

"At last Walnut, aristocrat of cabinet woods, can be used for interior woodwork in homes of moderate cost. . . . For centuries Walnut has been the preferred wood for fine residential building. By reason of its prestige, its appealing beauty of texture and coloring, and its superb physical qualities, it is no less the preferred wood for innumerable homes from which it has heretofore been excluded by the high cost of special fabrication."

IN THESE words a very large and nationally famous manufacturer of interior woodwork begins an announcement which is of lively interest to homemakers, builders, and architects.

What they are announcing is a new product, long needed; namely, *genuine solid American Walnut woodwork at popular prices*. These prices are made possible by the application of standard designing and quantity production methods.

There is of course nothing unusual in these methods. They have long been applied to the softwoods used for painted woodwork. In fact standardized designing and mass production offer the sole means by which quality can be joined with low price. They have remade the modern world, and their accomplishments in innumerable fields constitute a true epic of American progress.

Nor is there anything new about the application of quantity production methods to costly materials and fine products. Fine watches, radios, and motor cars are made that way; and now fine interior woodwork. The announcement is news; but within a short time the product itself will be regarded as just another example of the way in which the luxuries of one year become the necessities of the next.

Quantity production of Walnut interior woodwork means no lowering of quality and no loss of beauty. In fact, these items are smartly designed to harmonize with current modes in interior decoration, and are wholly free from the heaviness so often characteristic of natural woodwork in the past. It does mean, however, the elimination of many charges which necessarily enter into the cost of special design and fabrication, and many economies in all the processes of manufacture. The effect of these economies is to reduce prices to the point where a whole room in genuine Walnut may cost as little as $30 more than ordinary woodwork.

Although small, the pictures on this page speak for themselves. Many other pictures with complete descriptive information are available. See page 37.

Ill. 107. Living room showing "The Georgian" mantel.

Ill. 108. "The Colonial" stair. Equally handsome, but not pictured here, is "The English" stair.

Ill. 109. A stock pattern Walnut dining room, with French doors and paneled dado.

Ill. 110. Colonial door, revealing the gracious dignity of that style.

Ill. 111. Mitred sections of the "Avon" and "Penn" styles in solid Walnut trim.

Ill. 112. Grand piano in the style of Louis XV. The magnificent Walnut case has carved solid parts and choice veneers.

"MUSIC HATH CHARMS" FOR EYE AS WELL AS EAR

BETWEEN architecture, most solid and resistant of the arts, and music, most ethereal, there are spiritual likenesses so marked that Madame de Stael once called architecture "frozen music."

A physical relationship exists as well, based on the circumstance that music's power to charm depends in part upon instruments whose size and character give them marked decorative and even architectural importance. Piano, organ, radio-phonograph, and radio—all are housed in cabinets which play a large part in the balance and the beauty of a finished room.

Thus the homemaker is concerned not only with the musical qualities of the instruments she buys, but also with their appearance. In fact, the question of appearance is even more important here than in the case of other furniture; for the larger musical instruments stand alone, and their flat planes and large masses are not relieved by other things, as is a bookcase by its books, a desk or china cabinet by its fitments, or a sofa by the pattern or texture of its covering. These instruments must be relieved by skillful use of wood figure, and keyed softly into their backgrounds by harmonious coloring; otherwise they will seem over-conspicuous and heavy.

Ill. 114. Radio cabinet in American Walnut; matched crotch and stumpwood.

Ill. 113. Radio-phonograph in the English Gothic style; Walnut cabinet.

Ill. 115. Vertical-grand piano in figured rotary and burl Walnut veneers.

Ill. 116. That 20th Century marvel, the electronic organ, is housed in American Walnut.

Ill. 118. A very large radio-phonograph of classic design, in American Walnut.

No one who is interested in musical instruments needs to be told that in recent years the march of progress in that field has been fast and exciting. Apart from its purely musical phases, that progress has brought many changes in cabinet design. The noble grand piano, like the console of the great organ, has of course not changed in outline; but the new vertical grands have brought into musical homes an entirely new decorative element. Low in height, and of graceful line and pleasing proportions, many of these instruments are fine examples of the cabinetmaker's art.

As for the radio and radio-phonograph, some of the country's ablest designers are at work in that field, and cabinet design has kept pace with mechanical improvements. Because of the limitations placed on form by function, the radio cabinet must depend largely for embellishment upon the interest, variety and beauty of wood figure. The fine new cabinets use that resource to the full, with charming and, upon occasion, with superb results.

Walnut's pre-eminence in the world of music is due in large measure to its figure and coloring. The wood offers the unique play of figure types, and the wide gamut of tones, required by the designer to ensure the charm of variety and distinction. Its natural color, a warm neutral neither too light nor too dark, is peculiarly effective in keying the larger instruments harmoniously into their wall backgrounds.

Ill. 122. Many of the finest fretted instruments are enriched by Walnut.

Ill. 117. Vertical-grand piano of traditional design, in highly figured Walnut stumpwood.

Ill. 119. Console radio cabinet in American Walnut; burl front panels.

Ill. 120. A large table model radio, in quartered Walnut and stumpwood.

Ill. 121. The heart of the grand organ; a console in American Walnut.

Ill. 123. Walnut is used alone for the book-ends and figurine, and with ceramics for lamps and small pieces.

Ill. 124. Console type sewing machine in genuine Walnut.

Ill. 125. Folding card table with top in figured veneers.

MULTIPLIED USES OF CONVENIENCE AND BEAUTY

BELOW AND ABOVE: Walnut, alone and with metal, glass, leather, and contrasting woods.

THE few pictures on this page and the next afford a hint, but only a hint, of Walnut's use in the small things which make for interest and convenience in the business of daily life.

Some of the pieces shown are purely decorative, some purely utilitarian. Others, like the desk clock, luncheon service and console sewing machine, combine both functions. All, however, serve intimate or domestic uses, and all belong to the category of what William Morris called "the sweeteners of life."

Before the coming of machinery such small objects of use or ornament often occupied, and rightly, a very high place in public esteem. All sorts of people, rich and poor, barbarian and sophisticate alike, took deep delight in them, and frequently the highest skill and artistry were lavished on their making. Many of the potteries and basketry of very primitive races are real works of art. Many of the fans and snuff-boxes of the Court of Versailles, the blades of Damascus and Toledo, the *netsuke* of old Japan, are marvels of faultless composition and craftsmanship. Many of the drinking vessels of ancient Greece are veritable masterpieces.

The machine made revolutionary changes. It created numberless new desires, and satisfied them at low cost. But it did not, and for a long time could not, satisfy the desire for beauty and distinction. For one thing, no one thought of the machine in connection with beauty. And for another, time was lacking. Here in America, with a continent to subdue, other desires were too urgent, the demand for purely utilitarian goods too insatiable.

Bust of Robert E. Lee, in Walnut, taken from a Confederate gunboat by a Union soldier in 1864.

French cartel clock of the Regency Period, in Walnut; Boston Museum of Fine Arts.

ABOVE AND BELOW: Walnut, alone and with metal, glass, and pottery.

Now the pendulum swings in the other direction. Today fine craftsmanship, with its slow skills and individual expression, is at work for those who care to pay for it. And the machine is at work for everybody, doing things which a decade or two ago no one would have conceived as possible. Refined amazingly by modern engineering, and linked with fine designing and the finishing touches of expert craftsmen, it is today filling our shops and homes with charming and useful things to which no one will refuse the appellation of "sweeteners of life."

For these new uses Walnut is peculiarly fitting. It has smartness, strength and beauty, and with them the gracious, livable quality so important in things designed for intimate daily use. It is easy to care for, and it is interesting. In lieu of the flat unvarying texture of metal or paint, and the hard brilliancy of glass, it offers texture infinitely varied, rich but quiet coloring, and the overtones of association and sentiment born of man's age-old love of trees and fine woods.

That the words of Ecclesiastes, "there is no new thing under the sun," cannot be taken too literally is revealed by even the shortest metropolitan shopping trip; for the present vogue for woods, which has influenced both the applied and the fine arts, and touched many fields from kitchenware to costume, has in fact led to the creation of a host of fascinating novelties. Yet in a broader sense the saying of the Preacher remains true. The current vogue is but the latest of many which have appeared throughout the centuries, from China west to Britain, and from Scandinavia to the Congo. Thus history records that "gold and silver and valuable wood were lavishly used for small objects of art" by the Egyptians of the First Dynasty. The First Dynasty began some 5300 years ago.

Marquetry panel, employing fine hardwoods without stain.

Walnut is always at your service.

A modern desk clock in Walnut.

Ill. 132. Office of the president of an American corporation; Walnut furniture and wall paneling.

THE DIRECTION OF AMERICAN AFFAIRS

THE title of this section is perhaps too fanciful. However, some warrant for it is to be found in the fact that to a very large extent the decisions which shape American affairs—in government, industry, finance and the professions—are today made by men and women who sit behind Walnut desks. Beginning with the White House at Washington, this wood is liked by people who are charged with responsibility for getting things done.

Doubtless the first desk was a slab of wood which, resting upon the knees of the scribe, offered a precarious support for the papyrus or parchment upon which he wrote. Later a single drawer to hold materials was added; and still later, legs to form a table. Eventually superimposed drawers replaced the legs, and the pedestal writing table, grandsire of both the present "kneehole" desk and the modern flat-top office desk, came into being.

During the 18th Century two kinds of desks were in common use—the pedestal writing table, and the bureau or escritoire. The latter, typified in this country by the Governor Winthrop desk, consisted of drawers below, pigeon-holes above, and a hinged flap. The secretary desk was a variant formed by adding glazed bookshelves. About 1750, in France, the cylinder-top desk was invented. The cylinder was sometimes made of solid wood curved to an axis, and sometimes as a tambour-frame, or narrow slats of wood jointed and attached to a canvas backing. The American roll-top desk, based on the tambour principle, appeared in the latter half of the 19th Century. By reason of its commodiousness, convenience and privacy, it was immensely popular for many years.

The evolution of the modern office, with its broader organization and complete filing system, in time converted the pigeon-holed upper structure into a sort of vermiform appendix, and the roll-top was superseded by the flat-top business desk of our own day. As the old-type desk went out Walnut came in, entering by way of the executive offices.

The contemporary American executive and professional office aims at, and achieves, a new note in decoration. Designedly handsome and impressive, it may be and often is luxuriously furnished. Even so, the first impression it creates is always one of simplicity, directness and efficiency. Ostentation is *tabu*. The appointments may be costly, but they will not be ornate.

This insistence upon effects of quiet dignity accounts in part for the very wide use of American Walnut in important office installations, as does the demand for

Ill. 133. LEFT: Executive office in Walnut; desk ends and back are in stumpwood, four-way matched.

Ill. 134. CENTER: Walnut desk and chairs of Early Dutch design; desk front and chairs of solid Walnut.

Ill. 135. RIGHT: Executive office in which intricately figured Walnut veneers are used for desk and wall panels.

fine quality. A further reason for the wood's popularity in this field, as in musical instruments and modern furniture, is afforded by its unmatched variety of figure. The modern office, except in unusual circumstances, eschews elaborate carving and most other forms of surface ornament, as over-sumptuous or undynamic; hence handsome wood figure is important in office furniture.

From the executive suite Walnut moved on into the outer offices, where its pleasantness, distinction and low upkeep costs have made it dominant in many types of installations. It cannot be used in the manufacture of the cheapest desks; but in the medium levels it is very widely used for general office work.

An office desk is an investment in working equipment. From the purely actuarial viewpoint its value may be measured by comparing length of service with first cost plus maintenance expense; and by that yardstick alone shrewd office managers have proved Walnut equipment to be a wise investment. However, that isn't the only yardstick. Most people consistently do better work in an environment in which they can feel a sense of pleasure and pride. Here the fine hardwoods have a great advantage over competing materials, which lack their individuality and warmth and quietness.

One who has not been especially interested in office desks, and is unfamiliar with the strides made by manufacturers and designers in that field, would find a shopping trip an interesting and surprising experience. The impression of so many laymen that there is small room for individuality, or for fine and varied styling in office furniture is wholly erroneous. The fact is that the range of selection is very wide. The few desks pictured here do not begin to suggest this range; yet even they vary in surface appearance from plain solid Walnut lumber to the most intricately figured veneers, and in style from Dutch Colonial to Modern. This is a fine thing. Stereotypes are tiresome, while individuality and distinction, in the office no less than in the home, are stimulating and inspiring.

Ill. 136. TOP: Department store executive office with open-pore finish Walnut furniture.

Ill. 137. SECOND: Walnut executive office desk in the Modern style.

Ill. 138. THIRD: General office of a navigation company, Walnut furniture and woodwork.

Ill. 139. BOTTOM: Partial view of a general office; Walnut furniture and woodwork.

Ill. 140. LEFT: Walnut filing cabinet of Italian design.

Ill. 141. Escalator in a department store. Walnut's beautiful figures and quietly rich coloring give it very wide use in store fixtures of every type.

AMERICAN WALNUT IN VARIED INDUSTRIES

Ill. 142. Designed by Herreschoff, this racing yacht is fitted with paneled cabins in American Walnut.

Ill. 143. BELOW, LEFT: Made about 1690, and now in the Metropolitan Museum, this cabinet is a reminder of Walnut's wide use for museum cases, silver and jewel caskets, instrument cases, *et cetera*.

IN LARGE measure it is by the making and distribution of many things, by converting raw materials into useful products, and into tools for making other useful products, that the world is enriched and men progress to fuller and comelier ways of life.

Thus industry is not only the servant of civilization, but also its creator. The spirit of American industry has made possible our present way of life, and it now constitutes our highest warrant for the hope of further progress.

It is a bold spirit, resourceful, unresting, and with a capacity for co-operative effort unknown in other lands. Critics have accused it of aggressiveness; but no one has with any show of justice accused it of lethargy, and none but the blind have failed to see it as a powerful lever which, throughout a century of good times and bad, has helped to raise this nation to higher levels of opportunity and enjoyment.

Taught by experience that it cannot stand still, but must go forward or perish, industry eagerly welcomes new ideas and methods, makes great expenditures to develop new products and improve old ones. It maintains a thousand research organizations, scraps the costliest machinery when something more efficient is invented, canvasses the earth for new materials and new markets. In fields like social organization, politics and education, the world moves slowly. Inertia, timidity, and the power of vested interests hold it to old routines. But in the field of industry leadership is of necessity open-minded and swift in action.

In its latest phase, American industry has turned to beauty as an element of value. It has learned that people now want the things they use to be

Very inexpensive and handsome walls in Walnut. Ill. 144 shows genuine Walnut veneers on cellulose boards (Texboard); Ill. 145 Walnut veneers on a flexible backing (Flexwood), which can be hung like wallpaper.

Ill. 146. Smoking compartment, illustrating Walnut's use in railroad cars.

Ill. 147. American marquetry panel of Walnut inlaid with other woods; Metropolitan Museum of Art. Fine marquetry, made in this country, plays an important role in interior architecture.

Ill. 148. Motor car specially built for the King of Jugoslavia; interior fittings of Walnut.

Ill. 149. "Parkay" floors of solid Walnut can be laid, ready for use, in a few hours. See p. 26.

not only efficient but good-looking; that even a handsome furnace, though it may be hidden away in the basement, will be chosen in preference to one of commonplace or ugly design. This sharp change from the earlier phases of machine industry is reflected in increased consumption of fine cabinet woods for industrial purposes. Beauty is more easily achieved with materials possessed of individuality and distinction, and the fine woods now serve a widening circle of uses for which metal or enamel were formerly considered adequate.

To list these uses for even a single species would be tedious; to picture them here, quite impossible. As in earlier pages, a few photographs, chosen almost at random from fields as far apart as gunstocks and pleasure yachts, will have to serve as indices of the multiplied uses of American Walnut in varied industries.

It is interesting to note that modern industry refuses to accept what were once regarded as the natural limitations of timber. The discovery that timber's tendency to warp and split could be overcome by plywood construction was of course made long ago; but the processes of making and using plywood have been subjected to many and far-reaching improvements. Scores of cunningly designed woodworking machines have cut fabrication costs, and thus made expensive woods available for wider uses. We now have water-resistant glues and waterproof plywood, fireproof wood, heat-proof and acid-proof finishes. As to color, Walnut and other low-toned woods have, without loss of their distinctive figure, been bleached like veritable peroxides, and now lead the current vogue for "blonde woods" in furniture and decoration.

Ill. 150. Repose and dignity and enduring strength are revealed by this casket of solid American Walnut.

Ill. 151. "Owing to its non-warping property Walnut is largely used for gunstocks, for which it has no equal."—Encyclopedia Britannica. The world's armies may use gunstocks of plain Walnut; but the world's sportsmen demand the choicest parts of beautifully figured Walnut logs.

Ill. 152. ABOVE: A fine billiard table, typical of Walnut's many recreational uses.

Ill. 153. RIGHT: Partial view of an imposing Walnut elevator installation in a well-known department store.

Walnut bedroom from Millbach, Pennsylvania, about 1752. Courtesy of the Pennsylvania Museum, Memorial Hall.

"The royal cabinet wood of the world is without question our American Black Walnut. None other yields so readily to the craftsman's art, so gently to his tools and touch. None other endures through the centuries so true in grain, so fair in luster. None other takes on rarer beauty, subtler charm of texture, as the years and centuries pass . . . Age but mellows its soft sheen.

". . . From pioneer cabin to palatial metropolitan salon; across the mountains and the prairie, and across the whole history of the founding of our nation, the building of its homes, the development of its culture, the Black Walnut, royal wood of our America, has writ its saga. There is no other wood with such a record."

—W. E. Ekblaw, Professor of Geography and Anthropogeography, Clark University

Whether in simple or in sumptuous furniture, Walnut is enduring and easy to care for.

CONCERNING USE AND ENJOYMENT

THIS story started with some observations on the use of Walnut. It may well end on the same theme.

People have greatly changed their thinking about use and enjoyment. We read of women who in the seventies of the last century kept their best dress to be buried in. Certainly most American families owned a lot of things which were regarded as too fine for common use. Their best china and linens rarely saw the light of day. Their best room, the parlor, was closed for weeks or months on end, its slippery chairs and sofa, precarious center table, and myriad gimcracks doomed to blush unseen save when some great occasion opened the door for a few hours.

Our generation, in this respect at least, is wiser. Today people do not get their enjoyment of the things they own from mere pride of ownership, but from use. Nothing is too good for the family or the least important of its guests. The sacrosanct parlor is now with the roses of yesteryear. The modern living room is a place to be lived in.

Perhaps there is a cause-and-effect relationship between today's ideal of enjoyment through use, and the wide use of Walnut. Certainly Walnut is pre-eminently a wood for people who want to get the fullest pleasure from the things they own. Handsome, congenial, and unsurpassed in quality, it is notably enduring and easy to care for. Moreover, it is easy to restore and re-finish. Use it freely, and if at the end of twenty years—or ten—the surface needs attention, send for a finisher. The cost of his services will be small.

Good Walnut furniture is now so well finished by its makers that the housewife has no need to worry about its care. It should be dusted with a soft cloth, free from lint, and perfectly clean. To remove dirt and grime, and to restore the full beauty of the wood, wash with tincture of green soap or some other preparation of proved excellence, using a soft cloth loosely wrung from warm water; wipe with a second cloth wrung from tepid water; and finally wipe dry, rubbing with the grain. Those who are interested in the care or restoration of old furniture, or in finishing methods, will find sound directions in many standard books, including some of those listed on the next page.

Since full enjoyment depends upon decorative fitness and harmony as well as upon service, a word on the significance of texture is in point. In general a rough open texture, like that of oak or chestnut, affects the mind with a sense of strength and vigor and a sort of homespun informality; while a very close smooth texture, like that of satinwood, creates the contrary effects of delicacy and formal elegance. Walnut, a ring-porous wood, can be so finished as to concur in decorative effects of either type. Thus the open-pore finish, although it does not smack of crudity, obviously suits the earlier, heavier, and less sophisticated styles. Rooms in later and lighter styles, where delicacy and elegance are decorative aims, require Walnut finished to reveal a smooth and lustrous texture.

Here ends, so far as this edition is concerned, the Story of American Walnut. By compulsion, it is a brief story. Much pains have, however, been taken to make it accurate; and we hope that it may prove to be, like the wood itself, something that its readers can use and enjoy.

BIBLIOGRAPHY

The books listed at right are a few of the many which treat of Walnut and its uses.

Encyclopedia Britannica, 14th edition, articles on "Walnut," "Interior Decoration," etc.

Lumber and Its Uses, Royal S. Kellogg, Scientific Book Corporation.

Technical Bulletin No. 556, United States Department of Agriculture.

From Forest to Furniture, Malcolm H. Sherwood, W. W. Norton Company.

Practical Book of Period Furniture, Eberlein and McClure, Lippincott.

The Period Furniture Handbook, Mr. and Mrs. G. Glen Gould, Dodd, Mead & Co.

Old English Walnut and Lacquer Furniture, R. W. Symonds, R. M. McBride.

Furniture—Its Selection and Use, Clark B. Kelsey, Superintendent of Documents, Washington, D. C.

The American Wing, Metropolitan Museum of Art.

Blue Book of Philadelphia Furniture, William McPherson Hornor, Jr.

PUBLICATIONS

Publications of this office, which will be supplied without charge upon request, include:

The Story of American Walnut, 8th edition.

American Walnut for Interior Woodwork and Panelling.

The same, architects' edition.

Woodwork of American Walnut for Homes of Moderate Cost.

Interiors of American Walnut. Illustrated folder.

Veneer and Plywood Panels; Specifications and Descriptive Data.

Through the Ages with Walnut.

How to Identify Walnut and Avoid the Substitute. Folder for the general reader, illustrated with photographs and photomicrographs.

Walnut and the Periods of the Louis. Folder.

Building Customer Confidence; folder for salesmen, illustrated with photographs and photomicrographs.

"Black Walnut," reprint of an article by Professor W. E. Ekblaw of Clark University.

AMERICAN WALNUT MANUFACTURERS ASSN.

616 SOUTH MICHIGAN AVENUE · · · · · CHICAGO, ILLINOIS

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